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Title:

AN E-COMMERCE BASED METHOD AND SYSTEM FOR MANUFACTURER
HOSTING OF VIRTUAL DEALER STORES AND METHOD FOR PROVIDING A
SYSTEMIZATION OF MACHINE PARTS

- ☒ Fee Transmittal Form Attached in Duplicate
- ☒ Specification and Claim(s) [Total Pages]
- ☒ Drawing(s) [Total Sheets]
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Declaration

[Total Pages]

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Examiner :

Group/Art Unit:

;

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For Continuations or Divisional Applications only: The entire disclosure of the prior application, from which an oath or declaration is supplied, as set forth above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

Correspondence Address:

☒ Customer Number or Bar Code Label: 719

or

☐ Correspondence address below:

Name:

Address:

City:

State:

Zip Code:

Country:

Attorney/Agent: Jeffrey L. Myers

Registration No.: 44,252

Signature: Jeffrey L. Myers
Caterpillar Inc.

Date: 8/25/2000

Description

AN E-COMMERCE BASED METHOD AND SYSTEM FOR MANUFACTURER
HOSTING OF VIRTUAL DEALER STORES AND METHOD FOR
5 PROVIDING A SYSTEMIZATION OF MACHINE PARTS

This application claims the benefit of prior
provisional patent application Serial No. 60/193,871
filed March 31, 2000.

10

Technical Field

The present invention relates generally to
electronic commerce ("e-commerce") systems on the
Internet and, more particularly, to a system and
15 method whereby a manufacturer hosts a virtual dealer
store to provide real-time dealer-level inventory,
pricing, and sales to a consumer as well as providing
the consumer with a systemization of machine parts.

20 Background Art

The Internet is a convenient medium by which
consumers can have immediate access to complete
product and service information along with the ability
to purchase those products and services. In the past,
25 to provide e-commerce capabilities, many dealers
created virtual stores on their own dealer server
systems. Consequently, extensive upgrades and complete
infrastructure overhauls to their back-end systems
were often necessary. In addition, it was very

difficult for particular consumers to locate the nearest and most cost-effective dealer. Moreover, because many consumers relate to a particular brand or manufacturer of a product, rather than the name of a specific dealer, some consumers are unable to locate dealers on the Internet selling the desired product, not to mention the nearest or most cost-effective dealer.

Furthermore, some manufacturers solely created and completely operated virtual stores for dealers thereby creating a necessity to separately synchronize the manufacturer's virtual store data with each corresponding dealer. Here, again, many back-end system upgrades and overhauls are required by the manufacturer and dealer. The costs associated with these upgrades and overhauls exponentially increase with each additional dealer the manufacturer connects to its virtual store due to continuous data synchronization requirements as well as maintenance of all manufacturer and dealer back-end systems. Moreover, real-time data regarding a particular dealer may be non-existent, unavailable, or inoperative with this configuration due to synchronizing delays with each dealer.

Consequently, past back-end configurations fail to provide immediate, low-cost, and secure access to virtual stores and electronic commerce systems without complete infrastructure overhauls. Some companies simply cannot afford to go back to the

drawing board and completely revise the architecture of critical systems because they greatly depend upon existing infrastructure. What is needed, then, is a method and system for a virtual store which is

5 accessible from a manufacturer's website that defines a configuration and structure allowing use of existing system infrastructure of a dealer while providing real-time dealer specific information (pricing, availability, descriptions) to the consumer without

10 interfacing the consumer directly with the older infrastructure and systems.

Additionally, a front-end presentation of a systemization of machine parts so that consumers may properly and quickly select among various machine

15 parts is absent in the industry. Currently, machine parts are sold in person or over the phone with the aid of considerable cataloging documents requiring significant resources and time. In instances where part numbers or components are unknown, the mere

20 determination of the necessary machine parts may take even longer. This may be much more time than a consumer is willing to spend if he either only needs an individual machine part or group of machine parts. It would be helpful to have a means for consumers to

25 select specific groups or individual parts of machine parts for purchase, or to assemble only the required individual parts within a group of machine parts, without the aid of another human being or physical document. In addition, the number of different kinds

of machine parts for a single machine often makes it confusing for consumers to know which specific parts best meet their needs. Consequently, a front-end systemization of machine parts which allow consumers to properly and quickly select among various machine parts having different individual parts, groups, components, and systems is necessary.

The present invention is directed to overcoming one or more of the problems set forth above.

Disclosure of the Invention

In one aspect of this invention, an e-commerce based method for requesting information and purchasing products from a dealer through a manufacturer is disclosed. The method includes the steps of sending a request for detailed dealer information to a manufacturer server system using a client system, displaying real-time detailed dealer information on the client system based on the request, receiving the real-time detailed dealer information from the manufacturer server system, and accessing the real-time detailed dealer information with the manufacturer server system from a remote dealer server system via a middleware application system.

In another aspect of this invention, an e-commerce based system for requesting information and purchasing products from a dealer through a manufacturer is disclosed. The system includes a

client system, a manufacturer server system in communication with the client system, the manufacturer server system having a middleware application system, and a remote dealer server system in communication
5 with the middleware application system to provide real-time detailed dealer information to the manufacturer server system via the middleware application system with the manufacturer server system sending the real-time detailed dealer information to
10 the client system for displaying.

Brief Description of the Drawings

For a better understanding of the present invention, reference may be made to the accompanying
15 drawings in which:

FIG. 1 illustrates a diagrammatic representation of the e-commerce system in accordance with the present invention, illustrating the major participants and primary electronic transactions that
20 flow in the use of the system;

FIG. 2 illustrates an exemplary dealer's home page interface at a virtual dealer store;

FIG. 3 illustrates a personalized data interface screen utilized in a registration process at
25 a virtual dealer store;

FIG. 4 illustrates a dealership interface screen providing links to other aspects of the virtual dealer store;

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FIG. 5 illustrates a part ordering interface screen;

FIG. 6 illustrates a product type/product model/configuration types selection interface screen;

5 FIG. 7 illustrates a system component interface screen;

FIG. 8 illustrates a machine parts interface screen;

FIG. 9 illustrates the machine parts interface screen of FIG. 8 with a detailed schematic;

FIG. 10 illustrates the interface screen of FIG. 9 with selected parts;

FIG. 11 illustrates a "shopping cart" interface screen utilized by the consumer in ordering parts from the dealer;

FIG. 12 illustrates a "price list-pricing and availability" interface screen utilized by the consumer in ordering parts from the dealer;

FIG. 13 illustrates an "order summary" interface screen utilized by the consumer in ordering parts from the dealer; and

FIG. 14 illustrates a "thank you" screen for expressing appreciation to the consumer for ordering parts from the dealer.

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Best Mode for Carrying Out the Invention

A method and apparatus for providing a form of e-commerce via the Internet are described. In the following detailed description numerous specific

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details are set forth in order to provide a thorough understanding of the invention. However, it will be understood by those skilled in the art that the present invention may be practiced without these
5 specific details. For example, the invention is not limited in scope to any specific combination of hardware circuitry and software, software language, server environment, electronic communications network, or to any particular source for instructions executed
10 by the computer system. In other instances, well-known methods, procedures, components, and circuits have not been described in detail so as not to obscure the present invention.

The e-commerce virtual store system in
15 accordance with the present invention is an electronic information and sales system built from a combination of off-the-shelf hardware and software packages and custom software. It is intended to allow consumers to directly interact with dealers through a manufacturer,
20 rather than through purchasing agents or solely through the dealers themselves. One aspect of the present invention includes a technique by which a consumer can visit a manufacturer's website and purchase and receive information regarding various
25 products and services of a particular dealer. These and other aspects of the present invention will be described below in greater detail.

In one embodiment, the present invention is carried out in a computer system by a microprocessor

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executing sequences of instructions contained in a memory. More specifically, execution of the sequences of instructions causes the microprocessor to perform steps of the present invention, which are described
5 below. The instructions may be loaded into RAM for execution by the microprocessor from a ROM or other storage device. Also, the instructions may be received by the computer system via a network from another computer system. In other embodiments, hardwired
10 circuitry may be used in place of, or in combination with, software instructions to implement the present invention.

In the present invention, there is a connection via the Internet between a client computer
15 system and a web server system. The client system executes a web browser software application which allows the client system to access Hypertext Markup Language ("HTML") web pages and other data on various web servers. Because the user of the client system may
20 be a consumer wishing to purchase parts or products, the web server preferably includes a shopping cart software application for allowing the consumer to purchase these products, or else, the server may provide a hypertext link to another server which
25 executes such software.

Furthermore, the client system of the present invention preferably includes a bus, a processor coupled with the bus for processing information, and a main memory, such as RAM or other

dynamic storage device, coupled to the bus for storing information and instructions to be executed by the processor. The client system may further include ROM or other static storage device coupled to the bus for storing static information and instructions for the processor. A storage device, such as a magnetic disk or optical disk is also provided and coupled to the bus for storing information and instructions. The client system may also include a communication device and various input/output devices, such as monitors, keyboards, pointing devices, or printers, both being coupled to the bus. The communication device provides the client system with a connection to the Internet and may be a device suitable for such purpose, such as a telephone modem or ISDN adapter. It is understood that other details regarding the client computer system and architecture have been omitted so as to not obscure the present invention.

Referring now to FIG. 1, the e-commerce virtual store system of the present invention is generally indicated by numeral 10. The e-commerce virtual store system 10 allows a consumer or user to inquire about dealer-level inventory, pricing, sales information, or to purchase an item on-line, among other features.

In the present invention, the consumer's computer is a client system 20 and includes web browsing software. Using the web browsing software and Internet connection 25 a consumer can navigate through

the Internet to the manufacturer's website or directly to a dealer's website on the manufacturer's server system 30. Notably, if the consumer arrives at the manufacturer's website first, the consumer can easily
5 access any particular dealer's website because, in the preferred embodiment, the manufacturer's website includes all of the dealer's capability to provide such information and purchasing capabilities. Initially, the dealer's website home page interface
10 screen, generally indicated by numeral 23 in FIG. 2, is shown with dealer identification information 28. The next step for the consumer is to either register through registration button 31 or to log-on as a registered consumer through log-on hyperlink 32. To
15 encourage registration for non-registered consumers, the advantages of registration are described and summarized, as generally indicated by numeral 14. The log-on hyperlink 32, after entering a proper username and password, will relocate the consumer to a screen
20 similar to the one depicted by numeral 29 in FIG. 4. During initial registration through the registration button 31, the consumer has an opportunity to create and individualize a personal webpage with personalized data on the personalized data interface screen 27, as
25 shown on FIG. 3. The consumer can select the specific type of industry news that he or she is interested in through an industry news input 36. Illustrative, but nonlimiting industries include: Agriculture 220; Construction 222; Engine (EPG) 224; Engine (Industrial

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OEM/Locomotive) 226; Engine (Marine) 228; Engine (Petroleum) 230; Engine (Truck) 232; Forestry 234; Heavy Construction 236; Industrial 238; Mining 240; Quarry/Aggregates 242; and Waste 244. In this

- 5 illustrative example, a checked input is provided to Industrial 238, Mining 240 and Waste 244. In addition, the consumer can select the specific location for weather for a series of U.S. or International cities through a weather input 37. Furthermore, the consumer
- 10 can track specific stocks or investments through a stock input 38. Hyperlinks to the consumer's favorite websites are also available through a hyperlinks input 39. After all of the personalized data is inputted, the consumer will then submit the information through
- 15 a submit button 33.

- The consumer is then directed to a dealer interface screen that is generally indicated by numeral 29 in FIG. 4 and can be re-accessed by tab 47 having the exemplary title of "Our Dealership." The
- 20 dealer identification information 28 is again present on this dealer interface screen 29. The consumer name 15 is also present as well as a registration update link 16 that directs the consumer back to the personalized data interface screen 27 in FIG. 3 as
- 25 well as a consumer equipment listing link 17 that directs the consumer back to a screen listing the consumer's equipment (not shown). Also, there is an industry news link 41 and a link for the consumer's favorite hyperlinks 42 to other Internet websites.

Furthermore, there is a general local, national and international news links 43 as well as the current weather conditions link 44. In this illustrative example, there is a first tier of buttons on the dealer interface screen 29 that includes a "Home" button 122, a "Company Profile" button 124 that provides a link to specific dealer information (not shown), a "Products" button 126 that provides a link to specific products offered by that particular dealer (not shown), a "Services" button 128 that provides a link to specific services offered by that particular dealer (not shown), and an "Industries" button 130 that provides a link to specific industries associated with that particular dealer (not shown).

There is an illustrative second tier of buttons located underneath the first tier of buttons described above. This includes another "Home" button 132 that directs the consumer to the manufacturer home page interface screen (not shown), a "Contact Us" button 134 that allows the consumers to send e-mail to the Dealer (not shown), a "Search" button 136 that allows the consumer to search the entire website and a "Help" button 138 that provides assistance to the consumer in utilizing the website. Contact Link 140 performs the same function as the "Contact Us" button 134. There are also a number of ancillary hyperlinks that include "Highlights" 142, "Dealer Products & Services" 144, "Dealer Industries" 146 and "Industry Talk" 148. All of these ancillary hyperlinks are self-

explanatory and will direct the consumer to additional informational screens that are not shown.

The consumer has the option of ordering parts directly from the dealer by selecting tab 45, which has the exemplary title of "PartStore". Upon selecting tab 45, the consumer is directed to a part ordering interface screen that is generally indicated by numeral 50, in FIG. 5, so that the consumer can order specific parts from the dealer. In the background, an example of a part is graphically displayed as indicated by numeral 51. A "PartStore Home" tab is indicated by numeral 71 and allows the consumer to return to this interface screen should it be desired.

The "Express Order" links, generally indicated by numerals 54 and 254, will direct the consumer to a shopping cart interface screen that is shown in FIG. 11 and generally indicated by numeral 56. The actual ordering of the part by the consumer will be described later.

The "Frequent Order Lists" links, generally indicated by numerals 58 and 258, will direct the consumer to a screen showing previously utilized part ordering lists (not shown). The "Part Store Procedures" link, generally indicated by numeral 60, will direct the consumer to a screen providing advice (not shown) on how to utilize the e-commerce virtual store system 10. The "Part Store Activity" link, generally indicated by numeral 62, will direct the

Here the consumer, via the web browsing application, selects a system of machine parts from at least two available systems, as illustrated by "Step 1: Choose a System" 74 in FIG. 7. Based on the
5 selected system, the consumer then selects, from at least two different components, a component of machine parts, as shown by "Step 2: Choose a Component" 76 in FIG. 7. Based on the selected component, the consumer then selects, from at least one group of machine
10 parts, a group of machine parts 78, as shown on the right side of FIG. 7. A specific chosen group of machine parts is identified by numeral 82.

An equipment information link 79 will additionally direct the consumer to a screen providing
15 more information regarding the selected equipment (not shown). After selection of one chosen group of machine parts 82, the consumer is directed to an exemplary machine parts interface screen, generally indicated by numeral 80, such as that shown in FIG. 8. Here, the
20 description of the selected group of machine parts 82 and the name of the selected group of machine parts 81 are shown together. There are two main informational sections on this machine parts interface screen 80 with the chosen entire group of machine parts 84 and
25 individual parts 87, which compose the group of machine parts, thereby allowing the consumer to inquire or purchase either an entire group of parts or select from the individual parts that constitute the entire group. There are five columns of information

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that include a Reference 88, Quantity 90, Note 92, Part No. 94, and Part Name 96. Reference 88 provides some designation to either the part or group. Quantity 90 allows the consumer to select a desired quantity and input this value. Note 92 notifies the consumer that there is a link that allows the consumer to access additional information by clicking on the part number. Part No. 94 identifies a specific part number in the system and, if underlined, provides a hyperlink for the consumer to access additional information screens (not shown) and Part Name 96 provides an associated descriptor for a part number. Under the individual parts 87 portion of the machine parts interface screen 80 is a column 97 labeled "Req. Qty." which indicates the quantity required to replace or fix the part indicated. There is also a "Go Back" button 93 that allows the consumer to return back to the previous interface screen. Furthermore, if the consumer desires to view schematic drawings of the selected entire group or individual parts of the machine, with corresponding reference numerals, the link "View Parts Graphic" 98 will display such information. Selecting such link 98 will display the exemplary schematic screen interface found on FIG. 9 and generally indicated by reference numeral 85. The individual parts portion 87, in addition to displaying columns relating to part names, for example, illustrates reference numerals, as explained previously, which conveniently correspond to the

schematic drawing 100 and further aid the consumer in quickly making the proper part selection.

This method of systemization, then, provides a quick and easy to understand explanation of the different systems, components, groups and individual parts that can be selected to remedy a machine part in need of repair or replacement. It also prevents delay and incorrect ordering of particular groups or individual parts of machine parts by eliminating human miscommunications and confusion between a dealer and consumer. The method further allows a consumer to order select individual parts without having to order an entire group of machine parts. Consequently, a consumer can more economically purchase a variety of different individual machine parts for his particular needs. This systemization also allows a consumer to select a small and more affordable quantity of individual parts. The present invention's method of providing a systemization of machine parts to a consumer, therefore, allows for easy, accurate, convenient, and quick selection of machine parts.

After deciding whether a group and/or individual part(s) are desired, the consumer then selects the quantity of each group and/or individual part(s), as shown in FIG. 10. In this example, in the portion of the schematic screen interface 86 entitled entire group of machine parts 84, under the column entitled Reference 88, the designation "Grp" 266 appears, under the column entitled Quantity 90, the

input 267 is blank, under the column entitled Note 92, the designation is blank 268, under the column entitled Part No. 94, the part number "4N-9599" is listed 269, and under the column entitled Part Name 5 96, the part name "RADIATOR GP" is listed 270.

In this example, in the portion of the schematic screen interface 86, in the individual parts portion 87, in the first row, under the column entitled Reference 88, the designation "1" appears 10 271, under the column entitled Quantity 90, the input 272 is the numeral "1", under the column entitled Note 92, the designation is "Y" for yes 273, under the column entitled Part No. 94, the part number "7N-9061" is listed 274, and under the column entitled Required 15 Quantity 97, the quantity of one is listed 275 and under the column Part Name 94 the name "RADIATOR GROUP" is listed 276. Preferably, when a consumer clicks on input 272, for example, the required quantity of parts automatically appears inside input 20 272, without any additional input, to correlate with the quantity listed 275. If the consumer does not need or want the required quantity, he can easily change input 272 by entering the desired quantity.

In the second row in the individual parts 25 portion 87, under the column entitled Reference 88, the designation "2" appears 277, under the column entitled Quantity 90, the input 278 is the numeral "4", under the column entitled Note 92, a designation is not present 279, under the column entitled Part No.

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94, the part number "1A-2029" is listed 280, and under the column entitled Required Quantity 97, the quantity of "4" is listed 281 and under the column Part Name 94, the name "BOLT" is listed 282.

5 In the third row in the individual parts portion 87, under the column entitled Reference 88, the designation "3" appears 283, under the column entitled Quantity 90, the input 284 has no numeral present, under the column entitled Note 92, a
10 designation is not present 285, under the column entitled Part No. 94, the part number "8N-4853" is listed 286, and under the column entitled Required Quantity 97, the quantity of "1" is listed 287 and under the column Part Name 94, the name "GASKET" is
15 listed 288.

 In the fourth row in the individual parts portion 87, under the column entitled Reference 88, the designation "4" appears 289, under the column entitled Quantity 90, the input 290 has the numeral
20 "3" present, under the column entitled Note 92, a designation is not present 291, under the column entitled Part No. 94, the part number "0S-0509" is listed 292, and under the column entitled Required Quantity 97, the quantity of "3" is listed 293 and
25 under the column Part Name 94, the name "BOLT" is listed 294.

 In the fifth row in the individual parts portion 87, under the column entitled Reference 88, the designation "5" appears 295, under the column

entitled Quantity 90, the input 296 has the numeral "9" present, under the column entitled Note 92, a designation is not present 297, under the column entitled Part No. 94, the part number "5M-2894" is listed 298, and under the column entitled Required Quantity 97, the quantity of "9" is listed 299 and under the column Part Name 94, the name "WASHER" is listed 300.

In the sixth and final row illustrated in the individual parts portion 87 of the schematic screen interface 86, under the column entitled Reference 88, the designation "6" appears 301, under the column entitled Quantity 90, the input 302 has no numeral present, under the column entitled Note 92, a designation is not present 303, under the column entitled Part No. 94, the part number "5S-1213" is listed 304, and under the column entitled Required Quantity 97, the quantity of "1" is listed 305 and under the column Part Name 94, the name "PLATE" is listed 306.

When finished making the appropriate selections, the consumer is shown the items he or she has collected in a shopping cart via a shopping cart interface screen 56, as illustrated in FIG. 11. In the preferred embodiment, the shopping cart software application resides on the manufacturer server system 30. The shopping cart application allows the client system 20 to create a parts list 102 for purchasing or inquiring about products on-line. There are five

columns of information that include Quantity 90, Serial No. 106, Part No. 94, Part Name 96, and Removal Option 112. Quantity 90 allows the consumer to utilize the previously selected or entered quantity and automatically inputs this value at input 290. Serial No. 106 identifies a specific serial number prefix associated with selected part numbers. Part No. 94 identifies a specific part number in the system and Part Name 96 provides the associated descriptor.

10 Additionally, just as the shopping cart application allows a consumer to add products, it also allows deletion of products from the virtual shopping cart on the manufacturer server system 30 and thus removal links are designated in this fifth column 112.

15 In the first row in the portion of the shopping cart interface screen 56, under the column entitled Quantity 90, the input 290 has the numeral "3" present, under the column entitled Serial No. 106, an exemplary serial number appears 310, under the

20 column entitled Part No. 94, the part number "0S0509" is listed 292, under the column Part Name 94, the name "BOLT" is listed 294 and under the column Removal 112, a hyperlink Remove 312 is listed that allows the consumer to delete the item from the shopping cart

25 interface screen 56.

In the second row in the portion of the shopping cart interface screen 56, under the column entitled Quantity 90, the input 278 has the numeral "4" present, under the column entitled Serial No. 106,

an exemplary serial number appears 314, under the column entitled Part No. 94, the part number "1A2029" is listed 280, under the column Part Name 94, the name "BOLT" is listed 282 and under the column Removal 112, a hyperlink Remove 316 is listed that allows the consumer to delete the item from the shopping cart interface screen 56.

In the third row in the portion of the shopping cart interface screen 56, under the column entitled Quantity 90, the input 296 has the numeral "9" present, under the column entitled Serial No. 106, an exemplary serial number appears 318, under the column entitled Part No. 94, the part number "5M2894" is listed 298, under the column Part Name 94, the name "WASHER" is listed 300 and under the column Removal 112, a hyperlink Remove 320 is listed that allows the consumer to delete the item from the shopping cart interface screen 56.

In the fourth and final row in the portion of the shopping cart interface screen 56, under the column entitled Quantity 90, the input 272 has the numeral "1" present, under the column entitled Serial No. 106, an exemplary serial number appears 322, under the column entitled Part No. 94, the part number "7N9061" is listed 274, under the column Part Name 94, the name "RADIATOR GROUP" is listed 276 and under the column Removal 112, a hyperlink Remove 324 is listed that allows the consumer to delete the item from the shopping cart interface screen 56.

In addition, changes to the contents of the shopping cart 56 can be updated through button 114, the shopping list can be saved through button 116 and the shopping cart can be emptied through button 118.

5 It is also to be understood that in the preferred embodiment, a shopping cart application 56 does not physically reside on the remote dealer server system 40. This is because it is more efficient in terms of cost, real-time accessibility, and convenience, for
10 example, to have the web applications run on the manufacturer server system 30 rather than on the dealer server system 40, as will be explained in more detail below.

Accordingly, once a consumer or user has
15 navigated to the manufacture's website and selected a specific dealer, logged on, and collected in his shopping cart the desired items for inquiry or purchasing, the consumer's web browser can send the requested information over the Internet via Internet
20 connection 25 to the manufacturer server system 30 by selecting the "Price & Availability" link 120, as shown in FIG. 11, for example. Referring again to FIG. 1, the manufacturer server system 30, using the middleware application system 35, then passes the
25 requested information to the consumer-specified dealer server system 40, such as an International Business Machines Corporation's (hereinafter IBM®) AS/400®, for example. IBM® is located at New Orchard Road, Armonk, New York 10504. The dealer server system 40 collects

small software program) in the web application server within the middleware application system 35. The shopping cart contents and other requested data are then converted into string format (using special
5 characters as delimiters) and are sent to the servlet. The servlet then extracts the data string and passes it to the middleware application system 35 which reads the string to determine which dealer it must connect to. The middleware application system 35, which is
10 implemented using a set of Java classes, that use, for example, IBM®'s Host Access Class Library® ("HACL"), then interacts with the requested dealer server system 40 via the CTA using its web application server. This particular implementation is necessary in order
15 provide real-time dealer specific information to the consumer without interfacing the consumer directly with the older dealer technology.

The middleware application system 35 thus first creates a new data object which is populated
20 with the shopping cart information retrieved from the passed string. After reading the string, the middleware application system 35 connects to the specified dealer server system 40 and creates and maintains a session between the particular dealer
25 server system 40 and the middleware application system 35, as explain previously. Again, this connection or session is made using IBM® HACL® technology, for example, which uses telnet to connect to the dealer server system 40 which provides an application program

interface ("API") that enables screen recognition and screen interaction (i.e., reading/writing/keystroke entry) between the consumer and CTA without the consumer being exposed to such older, less user-friendly "green screens." More particularly, by sending only the requested information to the dealer server system 40, rather than interfacing directly with the dealer server system 40, the consumer takes advantage of real-time dealer server system data without being exposed to the dealer server system 40 "green screens" and without exposing the dealer server system 40 to any direct and prolonged Internet connections with the client system 20. An Internet connection 25 is only made from the web application server within the middleware application system 35 to the dealer server system 40 after the consumer has successfully logged onto the virtual dealer store. Thus, the centralized manufacturer server system configuration allows for dealer control and security over its virtual store and dealer server system 40. This design minimizes the communication overhead between the manufacturer server system 30 and the middleware application system 35 because the middleware application system 35 performs a set of operations that do not require direct interaction with the consumer.

After the information transfer is complete, the middleware application system 35 converts the data object into a string and returns this string to the

calling servlet. The servlet then streams the string back to the manufacturer server system 30 which parses the string and gathers the information, such as availability, descriptions and pricing, and uses such information to display the next page on the web browser of the consumer's client system 20, as shown in FIG. 12 on the "Parts List - Pricing and Availability" interface screen that is generally indicated by 330. In summary, then, once a quote is requested by a consumer, the middleware application system 35 navigates through a set of screens in CTA, inputs the items, reads pricing, dealer-level inventory, and other data and returns this detailed dealer information to the consumer with a quote number for tracking the particular consumer's request in the event an order is placed by the consumer. On the "Parts List - Pricing and Availability" interface screen 330, there is a portion dedicated to Order Details 332 including a consumer identification number 334, a tracking serial number 336, and a quote number 338. There is a section providing notes 340 regarding the order and an e-mail hyperlink 342 that allows orders to be placed with special instructions. There is a "Parts List" that is generally indicated by numeral 344 with seven columns of information that include a Serial No. 106, Part No. 94, Quantity 90, Part Name 96, Availability 346, Unit Price 348 and Price 350. Serial No. 106 identifies a specific serial number prefix associated with selected part numbers.

Part No. 94 identifies a specific part number in the system. Quantity 90 allows the consumer to utilize the previously selected desired quantity and automatically inputs this value. Part Name 96 provides the
 5 associated descriptor associated with each part number. Availability 346 provides valuable information on how long it will take to obtain a part and the location of the source of the part. Unit Price 348 will provide a cost per unit and Price 350 provides
 10 the aggregate price for the specified quantity of parts.

In the first row in the portion of the "Parts List" 344, under the column entitled Serial No. 106, the exemplary serial number is blank 310, under
 15 the column entitled Part No. 94, the part number "0S-0509" is listed 292, under the column Quantity 90, the input 290 has the numeral "3" present, under the column Part Name 96, the name "BOLT" is listed 294 and under the column Availability 346, the designation
 20 "Peoria - 1 day" 352 is present, under the column entitled Unit Price 348, a unit price of \$5.60 is present 354, and under the column designated Price 350, an aggregate price of \$16.80 is present 356.

In the second row in the portion of the "Parts List" 344, under the column entitled Serial No. 106, the exemplary serial number is blank 314, under
 25 the column entitled Part No. 94, the part number "1A-2029" is listed 280, under the column Quantity 90, the input 278 has the numeral "4" present, under the

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column Part Name 96, the name "BOLT" is listed 282 and under the column Availability 346, the designation "Moline - 1 day" 358 is present, under the column entitled Unit Price 348, a unit price of \$64.81 is present 360, and under the column designated Price 350, an aggregate price of \$259.24 is present 362.

In the third row in the portion of the "Parts List" 344, under the column entitled Serial No. 106, the exemplary serial number is blank 318, under the column entitled Part No. 94, the part number "5M-2894" is listed 298, under the column Quantity 90, the input 296 has the numeral "9" present, under the column Part Name 96, the name "WASHER" is listed 300 and under the column Availability 346, the designation "Moline - 1 day" 364 is present, under the column entitled Unit Price 348, a unit price of \$2.49 is present 366, and under the column designated Price 350, an aggregate price of \$22.41 is present 368.

In the fourth and final row in the portion of the "Parts List" 344, under the column entitled Serial No. 106, the exemplary serial number is blank 322, under the column entitled Part No. 94, the part number "7N-9061" is listed 274, under the column Quantity 90, the input 272 has the numeral "1" present, under the column Part Name 96, the name "RADIATOR GROUP" is listed 276 and under the column Availability 346, the designation "Peoria - 1 day" 370 is present, under the column entitled Unit Price 348, a unit price of \$264.81 is present 372, and under the

column designated Price 350, an aggregate price of \$264.81 is present 374.

The total cost for all parts on the price list is tallied and generally indicated by numeral
5 375.

After the requested detailed dealer information and quote number are sent to the client system 20 and displayed, as shown in FIG. 12, the consumer may choose to continue to place an order by
10 selecting the "Continue" button 377. The order can also be cancelled by selecting the "Cancel Order" button 376. If an order is placed, the consumer is directed to the next page by the web browser of the consumer's client system 20, as shown in FIG. 13 on
15 the "Order Summary" interface screen that is generally indicated by 380. On this "Order Summary" interface screen 380, there is a portion dedicated to Order Details 332 including a quote number 338, consumer identification number 334, a tracking serial number
20 336, and a purchase order number 384. The new item not present on the preceding "Parts List - Pricing and Availability" screen 330 is the purchase order number 384 that is generated in conjunction with this specific transaction. As before, there is a "Parts
25 List" that is generally indicated by numeral 344 with seven columns of information that include a Serial No. 106, Part No. 94, Quantity 90, Part Name 96, Availability 346, Unit Price 348 and Price 350 with the same four rows of information as found on the

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5 The notes 340 are again replicated from the preceding
interface screen 330.

25 review a summary of his or her purchase.

It is understood that other details regarding the placement of an order at the dealer server system 40 using the quote number have been omitted so as to not obscure the present invention.

As explained above, the present invention's centralized manufacturer server system arrangement allows a consumer access to real-time detailed dealer information from a particular dealer server system 40 among multiple dealer systems twenty-four hours a day, seven days a week, thereby offering robust information and purchasing capabilities without interfacing a consumer directly with older dealer technology and systems. Detailed dealer information preferably includes such information as dealer-level inventory, pricing, and sales information, for example. If this information were stored on the manufacturer server system 30 or database 12, real-time data from numerous dealer databases would have to be consistently accessed and synchronized to the manufacturer server system 30 and database 12 costing exponentially more than the present invention in terms of mandatory upgrading of dealer systems and increased maintenance and delay times of the virtual storefront. Hence, with the centralized management server system arrangement of the present invention, dealers are freed from the burden of having to buy additional servers, worry about connections, security, or maintenance issues associated with creating an individual dealer web server environment. Furthermore, the present invention's method of providing a systemization of machine parts to a consumer allows for easy, accurate, convenient, and quick selection of machine parts. This

enables a consumer to order and inquire about parts without undue confusion or unnecessary delay.

While certain features of the invention have been illustrated as described herein, many
5 modifications, changes and equivalents will now occur to those skilled in the art. It is, therefore, to be understood that the appended claims, are intended to cover all such modifications and changes as fall within the true spirit of the invention. It is also
10 preferred that the present invention be limited not by the specific disclosure herein, but by the scope of the appended claims.

Industrial Applicability

15 The present invention is advantageously applicable in providing an e-commerce virtual store system, via a centralized manufacturer server system arrangement, to a consumer with the ability to view real-time dealer level inventory, product
20 descriptions, pricing, as well as purchase products electronically in a reduced dealer cost, increased dealer security, increased dealer control, and in a low-maintenance manner for the dealer. In addition, the e-commerce virtual store system, via a
25 systemization of machine parts, allows a consumer to efficiently select and assemble machine parts. Consequently, a dealer can efficiently provide a consumer with organized and valuable product information in addition to purchasing capabilities

Claims

1. An e-commerce based method for requesting information and purchasing products from a dealer
5 through a manufacturer, the method comprising:
 sending a request for detailed dealer information to a manufacturer server system using a client system;
 displaying real-time detailed dealer
10 information on said client system based on said request;
 receiving said real-time detailed dealer information from said manufacturer server system; and
 accessing said real-time detailed dealer
15 information with said manufacturer server system from a remote dealer server system via a middleware application system.
2. The method of Claim 1, further including
20 sending a quote number from said remote dealer server system with said detailed dealer information for identifying said request.
3. The method of Claim 2, further including
25 purchasing an item with said client system that further includes the steps of:
 sending said quote number to said manufacturer server system;

8. An e-commerce based system for requesting information and purchasing products from a dealer through a manufacturer, the system comprising:

a client system;

5 a manufacturer server system in
communication with said client system, said
manufacturer server system having a middleware
application system; and

a remote dealer server system in
10 communication with said middleware application system
to provide real-time detailed dealer information to
said manufacturer server system via said middleware
application system with said manufacturer server
system able to send said real-time detailed dealer
15 information to said client system for displaying.

9. The system of Claim 8, wherein said
remote dealer server system sends a quote number with
said detailed dealer information to said manufacturer
20 server system via said middleware application system.

10. The system of Claim 9, wherein said client system purchases an item by sending said quote number to said manufacturer server system, said manufacturer server system then sends said quote number to said remote dealer server system via said middleware application system, said remote dealer server system then completes said purchase and sends a confirmation number to said manufacturer server

system, said manufacturer server system then sends said confirmation number to said client system.

11. The system of Claim 8, said real-time
5 detailed dealer information is selected from the group consisting of dealer-level inventory, pricing, and sales information.

12. The system of Claim 8, wherein said
10 client system displays consumer personalized data received from said manufacturer server system.

13. The system of Claim 12, wherein said
15 consumer personalized data information is selected from the group consisting of weather, investments, stock portfolio, news and links.

14. The system of Claim 13, wherein said
20 news is selected from the group consisting of local, national, international and industrial.

15. An e-commerce based method for
requesting information and purchasing products from a dealer through a manufacturer, the method comprising:
25 creating an item list using a client system;
sending said item list to a manufacturer server system;

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displaying real-time detailed dealer information on said client system based on said item list;

receiving said real-time detailed dealer information from said manufacturer server system; and
accessing said real-time detailed dealer information with said manufacturer server system from a remote dealer server system via a middleware application system.

10

16. The method of Claim 15, further including sending a quote number from said remote dealer server system with said detailed dealer information to identify the items listed on said item list.

15

17. The method of Claim 16, further including purchasing said items with said client system further including the steps of:

sending said quote number to said manufacturer server system;

sending said quote number with said manufacturer server system to said remote dealer server system via said middleware application system;

completing said purchasing with said remote dealer server system;

25

sending a confirmation number to said manufacturer server system; and

sending said confirmation number with said manufacturer server system to said client system.

18. The method of Claim 15, wherein said
5 real-time detailed dealer information is selected from the group consisting of dealer-level inventory, pricing, and sales information.

19. The method of Claim 15, further
10 including displaying consumer personalized data received from said manufacturer server system on said client system.

20. The method of Claim 19, wherein said
15 client system consumer personalized data information is selected from the group consisting of weather, investments, stock portfolio, news and links.

21. The method of Claim 20, wherein said
20 news is selected from the group consisting of local, national, international and industrial.

22. An e-commerce based system for
requesting information and purchasing products from a
25 dealer through a manufacturer, the system comprising:
a client system for creating an item list;
a manufacturer server system for receiving
said item list; and

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10

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20

25

25. The system of Claim 22, wherein said real-time detailed dealer information is selected from the group consisting of dealer-level inventory, pricing, and sales information.

5

26. The system of Claim 22, wherein said client system displays consumer personalized data received from said manufacturer server system.

10

27. The system of Claim 26, wherein said client system consumer personalized data information is selected from the group consisting of weather, investments, stock portfolio, news and links.

15

28. The system of Claim 27, wherein said news is selected from the group consisting of local, national, international and industrial.

29. An e-commerce based method of providing a systemization of machine parts to a consumer, said method comprising the steps of:

collecting information from said consumer regarding a machine;

selecting a system of machine parts from at least two available systems, wherein each of said available systems includes at least two different components of machine parts;

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selecting a component of machine parts,
wherein each of said available components includes at
least one group of machine parts;

selecting a group of machine parts, and
5 wherein each of said available systems, sections, and
group are adapted to correspond to machine parts
within said machine; and

providing information to said consumer
regarding machine parts which are included in said
10 selected system, section, and group thereby allowing
said consumer to use said systemization of machine
parts.

30. The e-commerce based method of Claim 29,
15 wherein said step of collecting information from said
consumer regarding a machine includes product, model,
and configuration type.

31. An e-commerce based method of providing
20 a systemization of machine parts to a consumer, said
method comprising:

collecting information from said consumer
regarding a machine;

selecting a system of machine parts from at
25 least two available systems, wherein each of said
available systems includes at least two different
components of machine parts;

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selecting a component of machine parts,
wherein each of said available components includes at
least two different groups of machine parts;

selecting a group of machine parts, wherein
5 each of said available groups is comprised of at least
one individual part of machine parts;

selecting an individual part of machine
parts, and wherein each of said available systems,
components, groups, and individual part are adapted to
10 correspond to machine parts within said machine; and

providing information to said consumer
regarding machine parts which make up said selected
system, component, group, and individual part thereby
allowing said consumer to use said systemization of
15 machine parts.

32. The e-commerce based method of Claim 31,
wherein said step of collecting information from said
consumer regarding a machine includes a product,
20 model, and configuration type.

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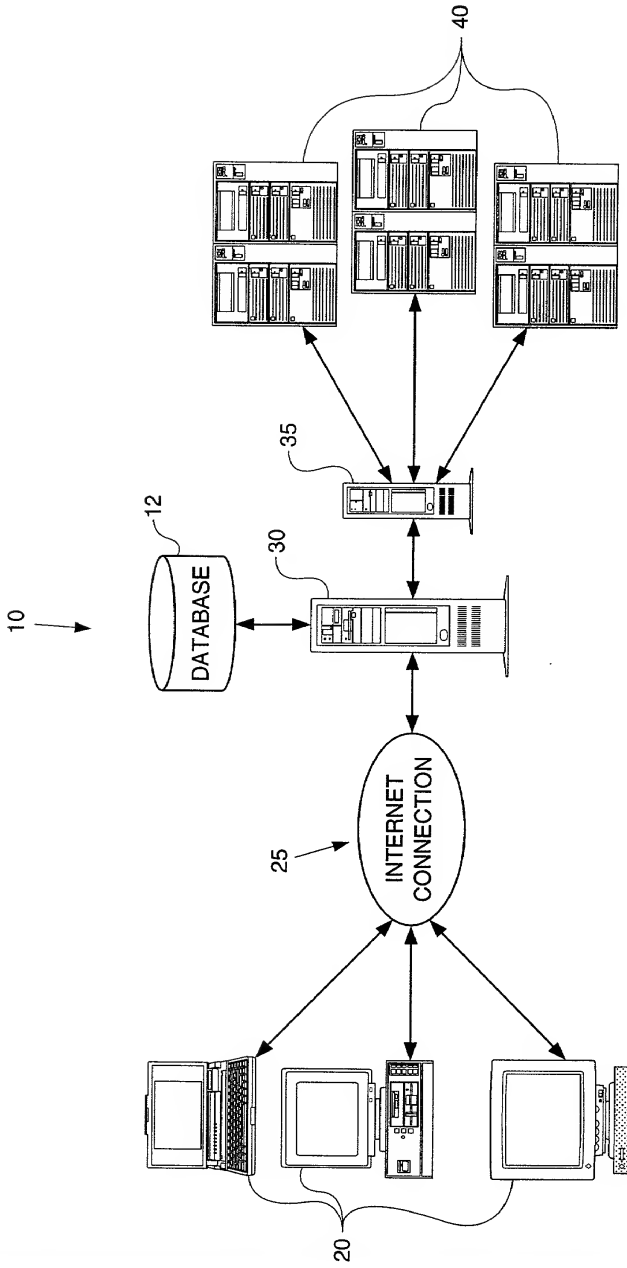
Abstract of the DisclosureAN E-COMMERCE METHOD AND SYSTEM FOR MANUFACTURER
HOSTING OF VIRTUAL DEALER STORES AND METHOD FOR
5 PROVIDING A SYSTEMIZATION OF MACHINE PARTS

10 An e-commerce based method for requesting
information and purchasing products from a dealer
through a manufacturer is disclosed. This method and
system includes sending a request for detailed dealer
information to a manufacturer server system using a
client system and displaying real-time detailed dealer
information on the client system based on the request,
the real-time detailed dealer information received
15 from the manufacturer server system, the manufacturer
server system accessing the real-time detailed dealer
information from a remote dealer server system via a
middleware application system.

2025 RELEASE UNDER E.O. 14176

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FIG. 1





Registration

Your Profile

Personalized Information

Your Equipment

Customize Your Dealer Storefront

Please indicate the items below that interest you. Only selected items will appear on your Dealer Storefront.

INDUSTRIES

Please select the industries that interest you. Featured content such as articles and links will be personalized for you based on the inputs you select.

- 36
- ☐ Agriculture 220 ☐ Forestry 234
☐ Construction 222 ☐ Heavy Construction 236
☐ Engine (EPG) 224 ☒ Industrial 238
☐ Engine (Industrial OEM / Locomotive) 226 ☒ Mining 240
☐ Engine (Marine) 228 ☐ Quarry / Aggregates 242
☐ Engine (Petroleum) 230 ☒ Waste 244
☐ Engine (Truck) 232

WEATHER

Select regions and cities for which you would like to see weather forecasts.

- 37
- US City: OR International City:
1. ☐ ☐
2. ☐ ☐
3. ☐ ☐

STOCKS

Stock Symbols

- 38
1. ☐
2. ☐
3. ☐
4. ☐

LINKS:

- 39
1. ☐
3. ☐
- 33

FIG - 4 -

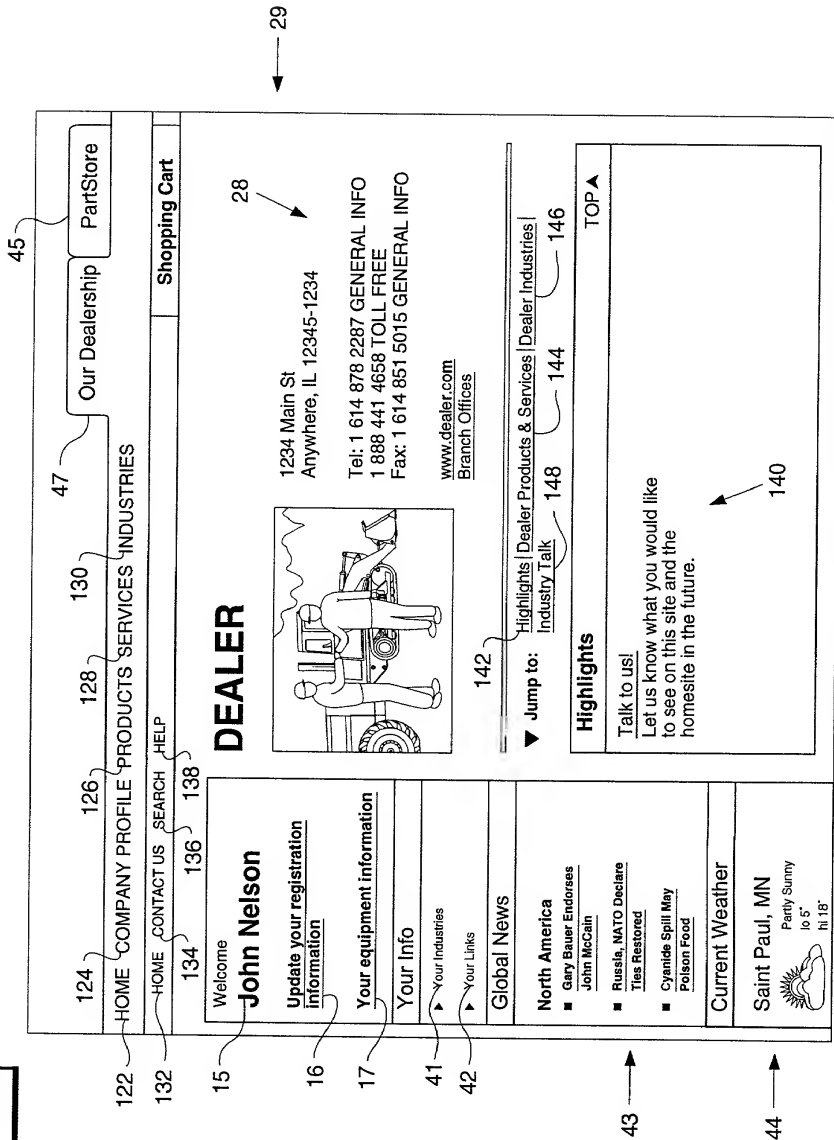
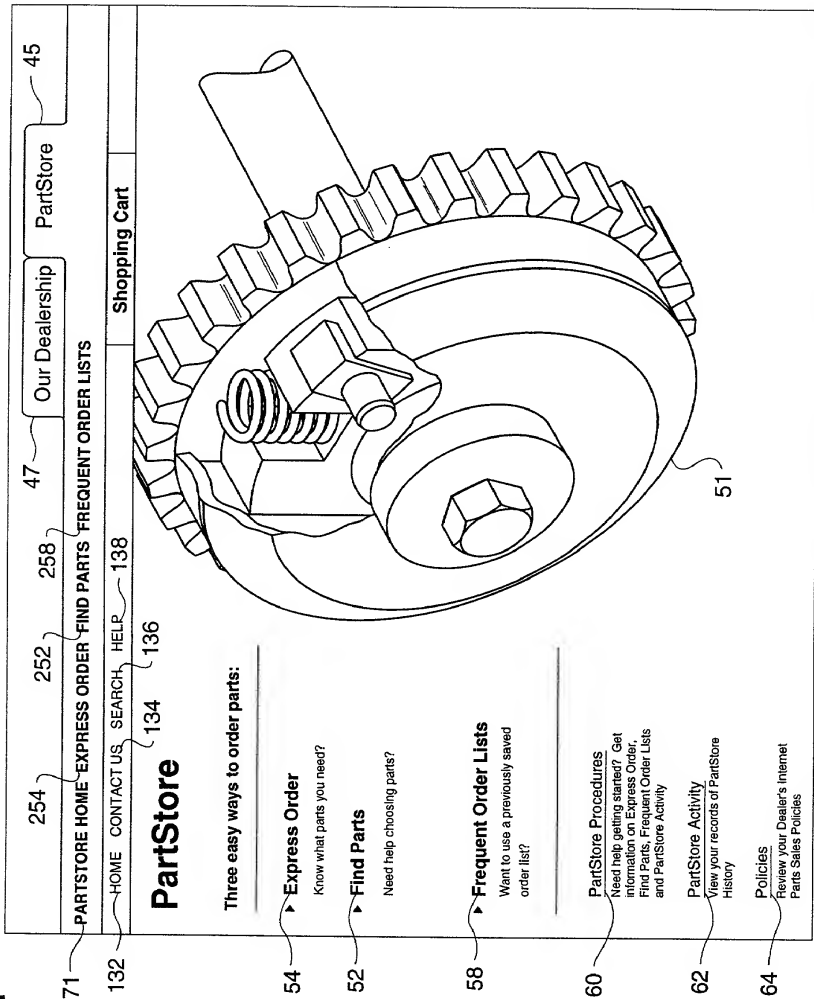


FIG. 5





254	252	258	47	Our Dealership	PartStore	45
71	PARTSTORE HOME EXPRESS ORDER FIND PARTS FREQUENT ORDER LISTS					
132	HOME	CONTACT US	SEARCH	HELP	138	
	134		136		Shopping Cart	

66

Step 1 : Choose a Product

BULLDOZER

68

Step 2 : Select a Product Model

80W 10U BULLDOZER

Please select a configuration for this model:

Note: Choose configuration carefully.
Selecting the wrong configuration may result in an incorrect parts order.

70

D10 TRACTOR/POWER SHIFT/ 76X359-UP (MACHINE) POWERED BY D348 ENGINE

10C, 10S AND 10U BULLDOZERS 80W1-493

D10 TRACTOR/POWER SHIFT/ 84W610-UP (MACHINE) POWERED BY D348 ENGINE

53

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254	252	258	47	45
71	132	136	79	74
PARTSTORE HOME		EXPRESS ORDER		FIND PARTS
HOME CONTACT US		SEARCH HELP		138
EQUIPMENT — (View equipment information)		Shopping Cart		
<p>76</p> <p>Step 1 : Choose a System</p> <p>COOLING SYSTEM</p> <p>78</p> <p>Step 2 : Choose a Component</p> <p>RADIATOR GP</p> <p>72</p> <p>78</p> <p>4W4286 — CONVERSION GP - RADIATOR</p> <p>4W8286 — CONVERSION GP - RADIATOR CORE STIFFENER</p> <p>FIELD INSTALLATION 1988/07/01</p> <p>1N3599 — COVER GP - PROTECTION</p> <p>1N3599 PROTECTION COVER GROUP - RADIATOR CAP</p> <p>SERIAL NO. 76X359 - UP & 84W822, 825 TO 840, 846 & 84W848 - UP</p> <p>PART OF 4N9588 RADIATOR GROUP SHOWN ON PAGE 37B 1988/07/01</p> <p>4N9588 — RADIATOR GP</p> <p>4N9588 — RADIATOR GROUP - PART 1 OF 2</p> <p>S/N 76X359 - 307 & 84W822, 825-840, 846,</p> <p>848-986, 7N9061 - PAGE 38 1988/07/01</p> <p>PART 2 OF 2</p>				



71 **PARTSTORE HOME EXPRESS ORDER FIND PARTS FREQUENT ORDER LISTS**

132 HOME CONTACT US SEARCH HELP 138

79 EQUIPMENT — (View equipment information)
 ◀ Model: D10 TRACK-TYPE TRACTOR 76X

254 252 258 47 Our Dealership PartStore 45

GO BACK 93

81 **4N9588 RADIATOR GP**

98 ▶ View Parts Graphic

82

84

88

90

266

87

ENTIRE GROUP

Ref. Qty. Note Main Part No. 94 Part Name 96

4N9588 RADIATOR GP 270

267 268 269

INDIVIDUAL PARTS

Ref. Qty. Note Main Part No. Req. Qty. Part Name

271	1	Y	7N-9061	274	1	RADIATOR GROUP	276
272	273	280	275			(Separate Illustration)	
277	2	279	1A-2029	281	4	BOLT	282
284	3	285	8N-4853	286		GASKET	287
283	4	291	OS-0509	293	3	BOLT	288
289	5	5M-2894	292	9		WASHER	294
			297	298	299		300

HIQ-S-

254	252	258	47	Our Dealership	PartStore	45
71	PARTSTORE HOME EXPRESS ORDER FIND PARTS FREQUENT ORDER LISTS					
132	HOME CONTACT US SEARCH HELP 138					
79	EQUIPMENT (View equipment information) Model: D10 TRACK-TYPE TRACTOR 76X					
<div>134</div> <div>136</div> <div>GO BACK</div> <div>93</div>						
<div>85</div> <div>84</div> <div>87</div> <div>276</div>						
<div>4N9588 RADIATOR GROUP-PART 1 OF 2</div> <div>S/N 76X359, 367 & 84W622, 625-640,646</div> <div>648-986. 7N9061-PAGE 38</div> <div>82</div>						
<div>ENTIRE GROUP</div> <div>92</div> <div>94</div> <div>88-Ref. Qty. Note Main Part No. Part Name</div> <div>90 4N-9588 269 RADIATOR GR 270</div> <div>266 267 268</div>						
<div>INDIVIDUAL PARTS</div> <div>97</div> <div>271-Ref. Qty. Note Main Part No. Part Name</div> <div>272 7N-9588 274 1 RADIATOR GROUP</div> <div>277 278 273 275 (Separate Illustration)</div> <div>284 2 279 1A-2029 280 4 BOLT 281 282</div> <div>283 3 285 8N-4853 286 GASKET 287 288</div> <div>290 4 291 0S-0509 292 3 BOLT 293 294</div> <div>289 5 297 5M-289A 298 6 WASHER 299</div> <div>295 301 296 302 303 305 306</div> <div>295 301 296 302 303 305 306</div>						

FIG-10-

254	252	258	47	Our Dealership	PartStore	45																																																																																																
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79	EQUIPMENT -- (View equipment information) ◀ Model: D10 TRACK-TYPE TRACTOR 78X																																																																																																					
<div>134</div> <div>GO BACK 93</div>																																																																																																						
<div>4N9588 RADIATOR GROUP-PART 1 OF2</div> <div>S/N 76X359, 367 & 84W622, 625-640,646</div> <div>648-986, 7N9061-PAGE 38</div>																																																																																																						
<div>ENTIRE GROUP 94</div> <table border="1"> <thead> <tr> <th>88</th> <th>Ref.</th> <th>Qty.</th> <th>Note</th> <th>Main Part No.</th> <th>Part Name</th> <th>96</th> </tr> </thead> <tbody> <tr> <td>90</td> <td></td> <td></td> <td></td> <td>4N-9588</td> <td>RADIATOR GR</td> <td>270</td> </tr> <tr> <td>266</td> <td></td> <td></td> <td></td> <td>268</td> <td></td> <td></td> </tr> <tr> <td>267</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							88	Ref.	Qty.	Note	Main Part No.	Part Name	96	90				4N-9588	RADIATOR GR	270	266				268			267																																																																										
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Fig. 11

254

252

256

47

Our Dealership

PartStore

PartStore

71

PARTSTORE HOME EXPRESS ORDER FIND PARTS FREQUENT ORDER LISTS

132

HOME CONTACT US SEARCH HELP

138

134

136

Shopping Cart

Add parts to your cart via Express Order, Find Parts, or Frequent Order Lists above.

Retain changes you make to part numbers or quantities by clicking 'Update Changes'.

Current Parts List		114	116	118	112
Qty	Serial No.	Part No.	Part Name		
3	76X 310	0S0509	BOLT	292	294 REMOVE
4	76X 314	1A2029	BOLT	280	282 REMOVE
9	76X 318	5M2894	WASHER	298	300 REMOVE
1	76X 322	7N9061	RADIATOR GROUP		276 REMOVE

102

120

PRINT PAGE

PRICE & AVAILABILITY

Fig-12-

PartStore Checkout

← Shopping Cart

Parts List - Pricing & Availability

Order Details

Customer ID: 20000

Tracking Serial Number:

Quote Number: 03Q000005

(Use this number when communicating with us to discuss this quote)

Parts List

106	Serial No.	94	Part No.	Qty	Part Name	Availability	Unit Price	Price
310		292	OS-0509	3	290 Bolt	294	Peoria - 1 day	352 5.60 354 16.80
314		280	1A-2029	4	278 Bolt	282	Moline - 1 day	358 64.81 360 259.24
318		298	5M-2894	9	296 Washer	300	Moline - 1 day	364 2.49 366 22.41
322		274	7N-9061	1	272 Radiator Group	Peoria - 1 day	370 264.81 372 264.81	
						276	TOTAL **	563.26
								375

Note:

† Indicates this part is non-returnable

* Part Names shown above may vary from the names shown in the Shopping Cart

** This quote does not include taxes, shipping and handling charges

➤ Send Email Order

Send order to us via email with special instructions. We will contact you about this order.

CANCEL ORDER

CONTINUE

330

344

12/14

332

334

336

106

310

314

318

322

350

356

362

368

374

375

342

377

376

340

119-13-

PartStore Checkout

Shopping Cart

Order Summary

Order Details

332 Quote Number: 03Q000005
338 Customer ID: 20000
334 Tracking Serial Number:
336 Purchase Order Number: 12345
384

Shipping Details

387 Shipping Address:
John Nelson
C/O ACME CONSTRUCTION
5555 W. ELMWOOD AVENUE
P.O. BOX 2000
388 Shipping Instructions:
PEORIA, IL 61604
Shipping Mode: none

Parts List

Serial No.	Part No.	Qty.	Part Name*	Availability	Unit Price	Price
106	292	3	OS-0509 Bolt	294	Peoria - 1 day	352 5.60
310	282	4	1A-2029 Bolt	282	Moline - 1 day	358 64.81
314	298	9	5M-2894 Washer	300	Moline - 1 day	364 2.49
318	274	1	7N-9061 Radiator Group	370	Peoria - 1 day	264.81
322	272	1		372		264.81
					TOTAL**	563.26

Note:

† Indicates this part is non-returnable
* Part Names shown above may vary from the names shown in the Shopping Cart
** This quote does not include taxes, shipping and handling charges

340

CANCEL ORDER

PLACE ORDER

376

390

380

344

350

356

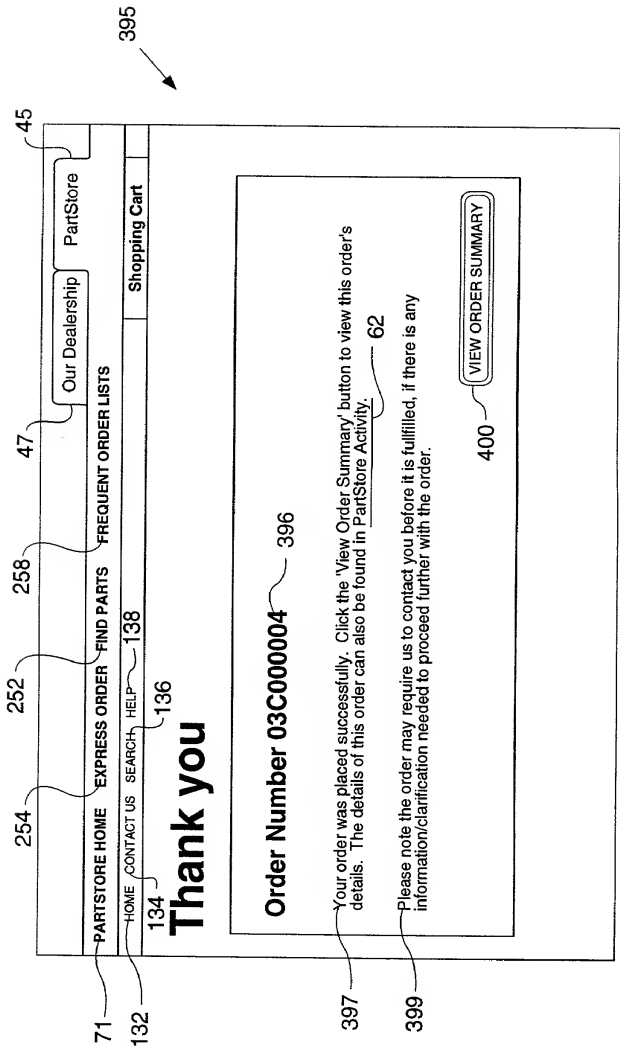
362

368

374

375

Fig. 14



DECLARATION AND POWER OF ATTORNEY

We, Thomas T Buzzell, Daniel T Driscoll, and Richard I Hartman, declare that we are citizens of the United States of America, residing respectively at East Peoria, Illinois; Peoria, Illinois; and Peoria, Illinois, and that we believe we are the original, first, and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled:

AN E-COMMERCE BASED METHOD AND SYSTEM FOR MANUFACTURER HOSTING OF VIRTUAL DEALER STORES AND METHOD FOR PROVIDING A SYSTEMIZATION OF MACHINE PARTS

the specification of which is attached hereto.

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims.

We hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:


Provisional Application Serial Number: 60/193,871

Provisional Application Filing Date: March 31, 2000


We acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. We further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by us or our legal representatives or assigns.

We hereby appoint Jeffrey L. Myers, Patent Office Reg. No. 44,252, telephone (309) 636-1843, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, our attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Jeffrey L. Myers, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 6/24/2000
THOMAS T BUZZELL Date
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1200 Highview Road
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 6/28/00
RICHARD I HARTMAN Date
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 7/14/00
DANIEL T DRISCOLL Date
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